



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/521,973

07/18/2006

Yuehui Zhou

102699-102

7575

8015 7590 06/17/2009

CYTEC INDUSTRIES INC.
1937 WEST MAIN STREET
P.O. BOX 60
STAMFORD, CT 06904-0060

EXAMINER

SHIAO, REI TSANG

ART UNIT

PAPER NUMBER

1626

MAIL DATE

DELIVERY MODE

06/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,973	Applicant(s) ZHOU ET AL.	
	Examiner REI-TSANG SHIAO	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/09/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This application claims benefit of the foreign applications:
CANADA 2398682 with a filing date 08/16/2002.
2. Amendment of claims 1-2, 5-7, 9 and 13 in the amendment filed on April 09, 2009 is acknowledged. Claims 1-13 are pending in the application.

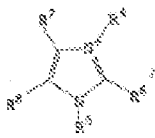
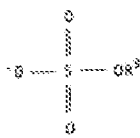
Information Disclosure Statement

3. Applicant's Information Disclosure Statement filed on April 09, 2009, has been considered. Please refer to Applicant's copy of the 1449 submitted herein.

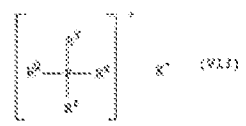
Responses to Amendment/Arguments

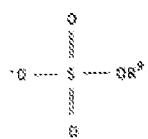
4. The rejection of claims 1-6 under 35 U.S.C. 112, second paragraph has been overcome in the amendment filed on April 09, 2009.
5. Applicant's arguments regarding the rejection of claims 1-13 under 35 U.S.C. 102(a) filed on April 09, 2009 have been fully considered but they are not persuasive. It is noted that Wasserscheid et al. '188, Holbrey et al. '049, or Wasserscheid et al. '757 independently discloses imidazolium compounds, wherein the anion represents methyl sulfate or $\text{Me}-(\text{CH}_2)_7\text{-O-SO}_3^-$. They still anticipate the instant compounds of formula (I), wherein the variable

Art Unit: 1626

Q⁺ represents  and the variable X⁻ represents , and the variable R₉ represents hydrocarbon group (i.e., methyl sulfate). The instant proviso (iii) just indicate the instant Q⁺ represents imidazolium cation, and X⁻ is not a sulfate (i.e., SO₄⁻). Therefore the rejection of claims 1-13 under 35 U.S.C. 102(a) is maintained.

6. Applicant's arguments regarding the rejection of claims 1-13 under the obviousness-type double patenting over claim 30 of Zhou et al. co-pending application No. 10/549,223 have been fully considered but they are not persuasive. It is noted that

Zhou et al. '223 claim compounds of formula (VII), i.e., , and X⁻

represents . Therefore the rejection of claims 1-13 under the obviousness-type double patenting over claim 30 of Zhou et al. co-pending application No. 10/549,223 is maintained. Applicants are requested to file a terminal disclaimer to overcome the rejection.

Claim Objections

7. Claim 13 is objected to because of the following informalities: (1) a term "and" is missing at the end of the first named compound; and (2) The symbol ";" needs to be replaced with a symbol "." at the end of the claim. Correction is required.

Art Unit: 1626

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rei-tsang Shiao whose telephone number is (571) 272-0707. The examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 1626

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/REI-TSANG SHIAO /

Rei-tsang Shiao, Ph.D.
Primary Examiner
Art Unit 1626

June 15, 2009